



National Transportation Safety Board

Office of Railroad, Pipeline and Hazardous Materials Investigations
Human Performance and Survival Factors Division
Washington, DC. 20594

Survival Factors¹ Factual Report – Addendum # 3

Exhibit 2. “A Guideline for Emergency Response Agencies”²

Supporting Documentation – Emergency Preparedness / Response

July 16, 2008

*Failure of Dixie Pipeline Company Pressurized Underground Transmission Pipeline, and
Subsequent Liquid Propane Release and Fire, near Carmichael, MS, on November 1, 2007*

NTSB Accident Number: DCA 08 MP 001

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¹ The scope of the Survival Factors Factual Report [in pipeline accident investigations] exclusively addresses the emergency preparedness and response, and injury causation aspects of the investigation.

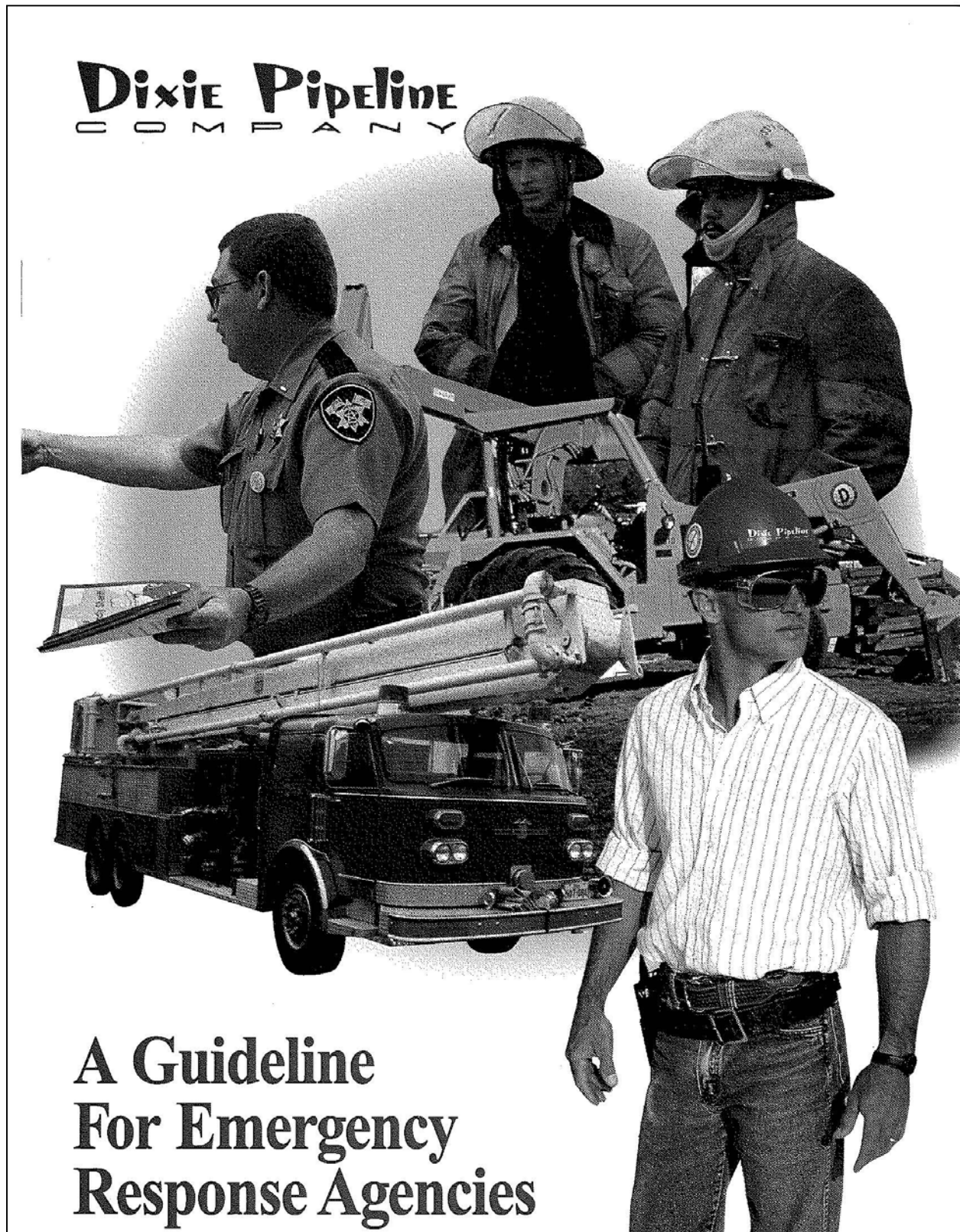
² ref. Survival Factors Factual Report; see § 6.9.1.m.

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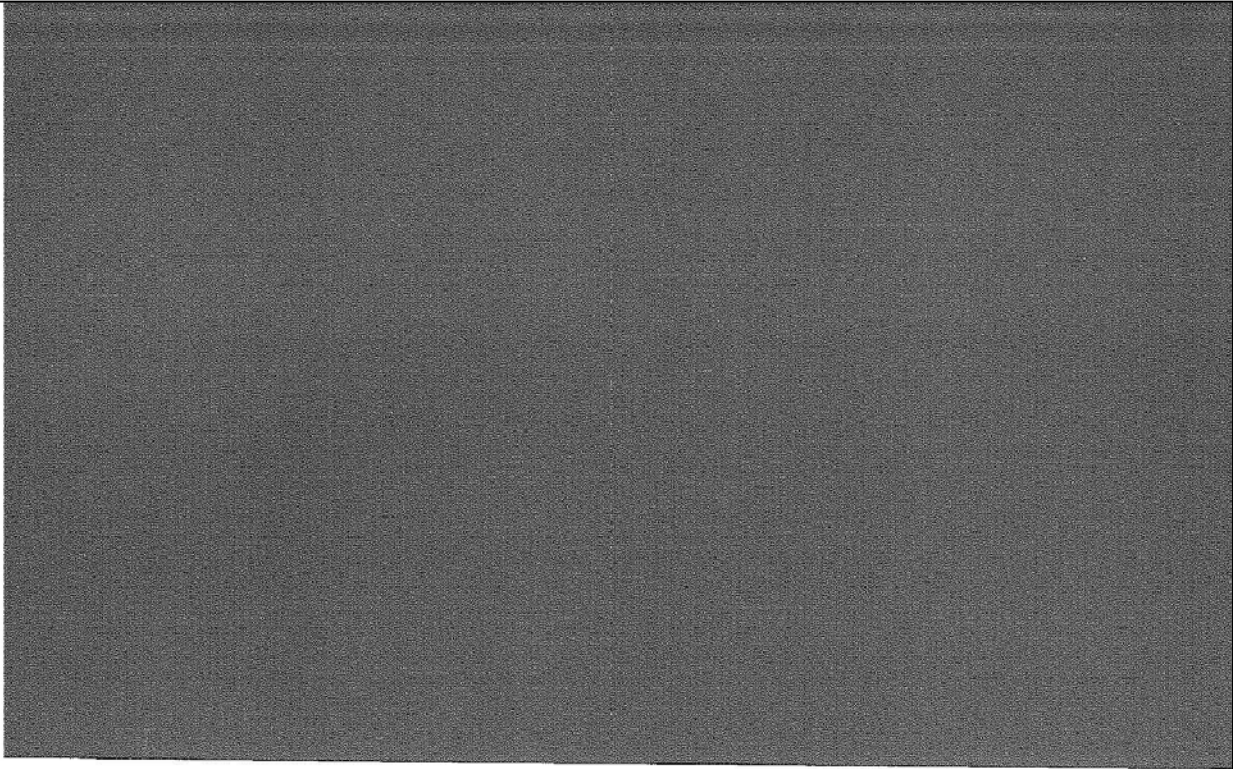
³ This transmittal is comprised of select pages of the identified publication, as deemed applicable to the topics / issues examined in the Survival Factors Investigation

⁴ the supplied document, comprised of 30 total pages, contained information pages that addressed topics extraneous to emergency preparedness and response, in which, for purposes of demonstrating exemplary document content, only the pages applicable to the Investigation [8 pages, total] are included in this report (e.g. as cited under this Attachment Title).

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Dixie Pipeline
C O M P A N Y

Dixie Pipeline Emergency Numbers
CALL 1-800-DIXIE77 — 1-800-349-4377, 24 hrs.
Visit our website at *www.dixiepipeline.com*

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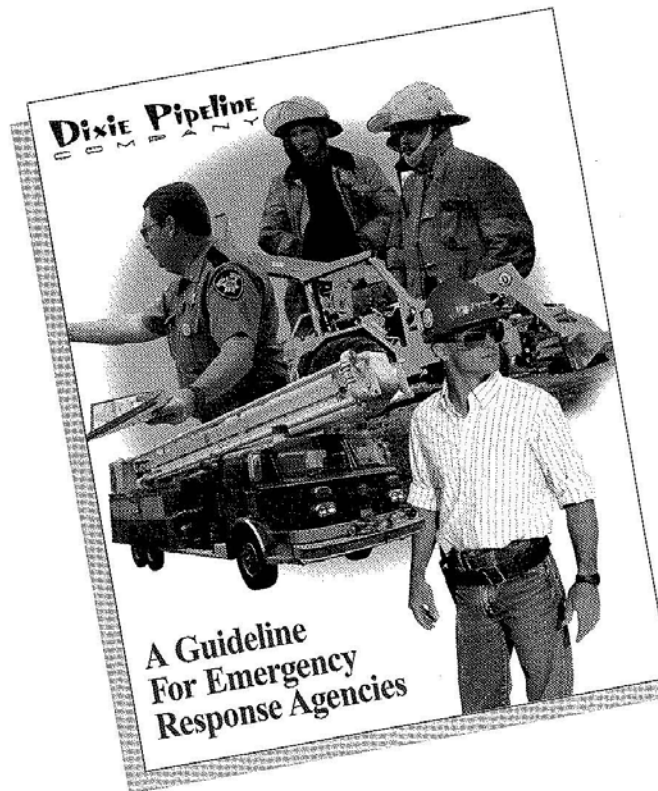
About This Guide

The purpose of this guide is to provide information about our pipelines to emergency response personnel. As responders, you know the value of being prepared and that information is a large part of safe and effective response to any emergency. We have included information about the products we transport, piping systems, inspection, maintenance, pipeline location, and our emergency plans.

Any emergency requires a joint effort approach. Pipeline emergencies require the coordinated efforts of response agencies and industry experts

in order to provide the desired safeguards to the public and the environment. We recognize the value of the unified incident command structure and our role, as operators of the pipeline system, to provide useful knowledge and support during an emergency. Our goal is safe operation, and our commitment is continuous improvement towards that goal.

General pipeline information is provided by the following “Trip Along the Pipeline.” Please take a moment to familiarize yourself with these pipeline operational basics.



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In The Event of an Emergency

- 1** Get detailed information about the emergency.
- 2** Call our Dispatcher at our Pipeline Control Center at 1-800-349-4377 and provide them with the detailed information. Dixie Pipeline personnel will be sent to the emergency site.
- 3** Approach the emergency site from the upwind direction and park your vehicle at a safe distance from the emergency site. A vapor cloud may not be visible, but vapors may be on the ground.
- 4** Evacuate people from the danger area to an upwind location.
- 5** Obtain medical help if needed.
- 6** Keep the danger area secure. Block off roads, railroads, and other routes around the site.
- 7** Eliminate ignition sources such as car engines, pilot lights, smoking materials, radios.
- 8** **DO NOT** attempt to close any valves without direction from Dixie Pipeline Company personnel.
- 9** **DO NOT** attempt to extinguish an HVL fire on the pipeline unless instructed by our representative. Accumulation of HVL vapors can pose a greater hazard of explosion if re-ignition occurs.
- 10** Perimeter fires can be extinguished.

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Identifying Pipeline Markers

Pipeline markers are located throughout our pipeline routes and at sites like road crossings to help identify the approximate location of our pipelines.

Our line markers list the commodity transported, the company name, and a 24-hour telephone number where a person monitoring our pipelines can be reached at any time.

The information provided on the line marker is helpful, but limited. It is important to remember that:

- Line markers are placed near the pipelines, but not necessarily directly on top of them.
- A pipeline may not follow a straight line between adjacent markers.
- Line markers cannot be relied on to provide information on the depth or number of pipelines in the area.

Look for these signs and indicators to determine if a pipeline is in the area.



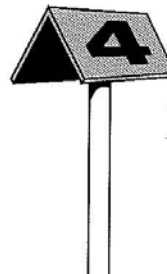
DOT Marker
(on a post,
ground level,
or on a curb)



**Flat
Fiberglass
Marker**



**Painted
metal, concrete,
or plastic pipe**



**Aerial
Marker**



**Corrosion
Test
Station**



**Casing
Vent
Pipe**

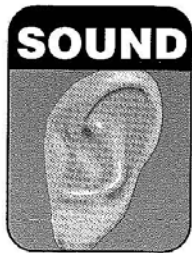
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Identifying A Pipeline Release

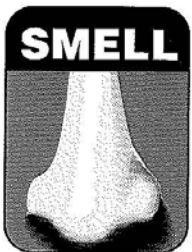
You can identify a release by:



- A dense white cloud or fog
- Accumulation of petroleum products on the ground
- A spot of discolored or dead vegetation
- Fire and smoke if the petroleum product has ignited
- Propane and butane are colorless products



- Listen for unusual noises—from a slight hiss to a roaring sound, depending on the magnitude of the leak.



- Detecting any strange or unusual odor can be an indication of a leak. Each petroleum product has its own characteristics. However, propane and butane are virtually odorless in the pipeline.
- Odorant is added to propane as it is being loaded onto transport trailers to allow users a way to detect it.

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Product Characteristics

Products transported through our pipeline systems are highly volatile liquids as described below.

Highly Volatile Liquids (HVLs)

Highly Volatile Liquids (HVLs) are comprised of products such as ethane, butane, propane, or mixtures of the individual components after processing.

Highly volatile liquid is transported as a liquid when under pressure in the pipeline, but becomes gaseous and forms a vapor cloud if released in the atmosphere.

The vapor clouds:

- Are highly flammable and they ignite very easily. The fire hazard is actually higher on a calm day, since the vapors remain more concentrated instead of being dispersed in the air.

- Are heavier than air and tend to settle to the ground, especially low lying spots.
- Can vary in size depending on wind and humidity conditions.
- Can drift from the immediate vicinity of a leak, becoming much less visible and detectable only by a gas detector. The vapors can still be ignitable and very dangerous.
- The vapors do displace oxygen which can result in asphyxiation. They can cause severe freeze burns if they come into contact with the skin.

Dixie Pipeline Products

| Liquid Products | % in air | | Flash Point F | psia Vapor Pres. @ 100 F | NFPA Hazard Identification | | |
|-----------------|----------|-----|---------------|-----------------------------|-------------------------------|--------------|------------|
| | LEL | UEL | | | Health | Flammability | Reactivity |
| Propane* | 2 | 10 | -156 | 185 | 1 | 4 | 0 |

Other Common Pipeline Industry Products (information only)

| Liquid Products | % in air | | Flash Point F | psia Vapor Pres. @ 100 F | NFPA Hazard Identification | | |
|-----------------|----------|-----|---------------|-----------------------------|-------------------------------|--------------|------------|
| | LEL | UEL | | | Health | Flammability | Reactivity |
| Gasolines | 1 | 8 | -45 | 7-10 | 1 | 3 | 0 |
| Distillates | 1 | 5 | >100 | 0-5 | 0 | 2 | 0 |
| Crude Oils | 1 | 8 | 100-300 | 1-10 | 1 | 3 | 0 |
| Propylene* | 2 | 11 | -162 | 227 | 1 | 4 | 1 |
| NGL/E-P mix* | 2 | 12 | -100 | 50-655 | 1 | 4 | 1 |

All are lighter than water, with flammable vapors heavier than air.

* Moved as liquids, these turn to gas if released and may form a vapor cloud.

Refer to DOT Emergency Response Guidebook for response actions.

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Emergency Preparedness

Dixie Pipeline Company has implemented an emergency preparedness program, not because we anticipate emergency situations arising, but because we recognize that even the safest environments can have emergencies “thrust upon them.” We also care enough about our employees, the community and the environment around us to be prepared to minimize the effects of an emergency should one arise. The program provides the framework for preparing our employees and responders to deal with emergency situations.

Dixie follows DOT, OSHA and EPA regulations and periodically conducts tabletop and mock emergency drills in accordance with these requirements as training so that we will be able to respond to any emergency situation in an organized and effective manner. Our employees have been trained as First Responder Operations Level, which is a response in a defensive fashion to contain the release from a safe distance, keep it from spreading, and prevent exposures. We coordinate with local response agencies to aid and assist them in their efforts to respond to pipeline related

emergencies. Dixie Pipeline strives to build good relationships with these agencies so that during an emergency situation we will be able to work effectively together.

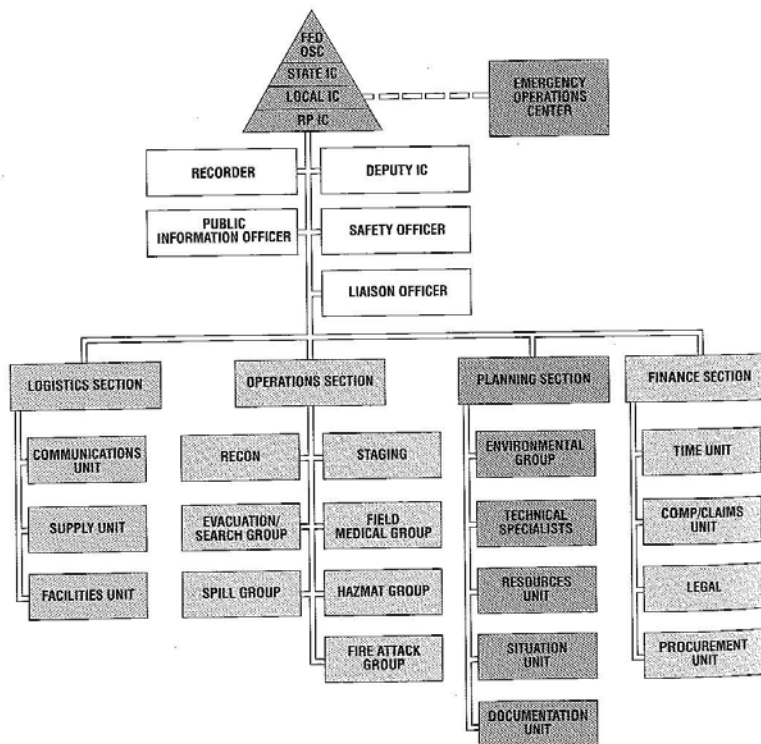
In the event of an accidental release of product, our facilities have fail-safe systems that help mitigate a release.

- At our terminals, emergency shutdown (ESD) systems will shutdown pipeline receipts, stop truck loading and close storage tanks.
- At our pipeline pumping stations, the ESD systems will shutdown pumping units and close key block valves.
- Along our pipeline, block valves are placed at strategic intervals for use in isolating any portion of the pipeline system.

The ESD system can be activated manually onsite, remotely by our control center, or by one of various facility electronic detection devices.

Incident Command System

Dixie Pipeline Company supports the Incident Command System for response to emergency situations. Dixie believes that by utilizing ICS and Unified Command, all parties that are pertinent to the response will be informed and involved in any decisions that are made in regard to the situation. Dixie recognizes that the public agencies have valuable expertise in emergency response situations and that Dixie personnel are knowledgeable concerning the products that we work with on a day-to-day basis. Utilizing ICS will enable all parties to work together efficiently and effectively to address any emergency situation that may be at hand.



-- End of Report --